

CLAIMS

1. A method, comprising:

obtaining an XML document;

accessing a compiled document type definition (DTD) for the XML document;

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verifying the XML document using the compiled DTD.

2. A method of claim 1, wherein verifying the XML document further

includes creating a structure corresponding to a DTD document.

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3. A method of claim 2, further including traversing the structure to verify the

XML document.

4. A method of claim 3, further including storing layers in a stack to maintain

15 a history.

5. A method of claim 1, wherein accessing the compiled DTD further

includes parsing a DTD document to generate source code.

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6. A method of claim 5, wherein parsing the DTD to generate the source code

further includes compiling the source code with a verifier interface to generate the

compiled DTD.

7. A method of claim 6, further including matching an interface in the

25 compiled DTD to access portions of the compiled DTD during verification.

8. A method of claim 1, wherein verifying the XML document using the compiled DTD further includes executing a verification algorithm against a structure, the verification algorithm being capable of distinguishing an order of elements in a DTD document.

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9. A method of claim 1, wherein verifying the XML document using the compiled DTD further includes generating one of an error, a verified XML document, and the verified XML document with an inserted attribute.

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10. A system, comprising:

an extensible markup language (XML) document including a plurality of tags;

and

a compiled document type definition (DTD) capable of verifying the plurality of tags in the XML document.

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11. A system of claim 10, further having a structure capable of verifying the tags in the XML document, wherein the tags are capable of identifying and providing meaning to data in the XML document.

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12. A system of claim 11, wherein the structure is a tree capable of storing unique occurrences of the plurality of tags.

13. A system of claim 12, further including a stack for tracking a history of visited nodes in the tree.

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14. A system of claim 10, further including an interface coupled to the compiled DTD, the interface being capable of providing access to portions of the compiled DTD.

5 15. A system of claim 14, wherein a verifier interface is compiled with source code to generate the interface.

16. A computer program embodied on a computer readable medium for verifying an XML document, comprising:

10 instructions for obtaining an XML document;
instructions for generating a compiled DTD; and
instructions for verifying an XML document against the compiled DTD.

15 17. A computer program of claim 16, further including instructions for generating a structure capable of verifying the XML document.

18. A computer program of claim 16, further including instructions for parsing a DTD document to generate a compiled DTD.

20 19. A computer program of claim 17, further including instructions for tracking a history in a stack relating to the structure.

20. A computer program of claim 17, further including instructions for determining the order of elements in the XML document within the structure.

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21. A computer program of claim 17, further including instructions for adding nodes to a tree defined as the structure.